RetelFV

Programme

Conference of the Italian Photovoltaic Network for Research, Development and and Innovation

Napoli - Bagnoli

27 - 28 May 2025

Status of 12 May 2025

Tuesday 27 May

08:30 - 09:30 | Registration

09:30 - 10:00 | Welcome addresses

Filippo De Rossi - Subcommissario per la bonifica ambientale e rigenerazione urbana dell'area di rilevante interesse nazionale Bagnoli

Gaetano Manfredi - Sindaco di Napoli

Valeria Fascione - Assessore con delega alla Ricerca, Innovazione e Startup della Regione Campania della Regione Campania

10:00-10:20

Giorgio Graditi
Direttore Generale ENEA
Fonti rinnovabili: iniziative e misure per una economia a zero emissioni di carbonio

10:20-10:40

David Moser
Managing Director Becquerel Institute Italia, vice chair ETIP PV
A strategic research and innovation agenda for PV

10:45-12:00

Tavola rotonda
Italia, Hub europeo del Fotovoltaico:
Una Visione Collaborativa per un futuro energetico resiliente

Moderator:
Massimo Mazzer, CNR, National Research Council | ReteIFV

Speakers

- **Cosimo Gerardi**, 3SUN
- **Gianluca Coletti**, FUTURASUN
- **Paolo Viscontini,** Italia Solare
- **Diego Percopo**, Set Energie
- **Marco Calabrò**, MiMIT
- **Elena De Luca**, MASE
- **Francesco Basile**, MUR

12:00 | Lunch break

13:00 | Topic 1 - Session 1
Fundamental research on photovoltaic materials and devices

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Hanna Ellis
European Commission - Joint Research Centre
Investigating Measurement Methodology for Perovskite PV Modules

5 min
Alice Scardina
Università di Pavia
Tuning the Orientation of Low-Dimensional Perovskites for Efficient Photovoltaic Devices

5 min
Debendra Prasad Panda
Università di Napoli Federico II
Deciphering the Role of Halide Engineering in Enhancing Outdoor and Indoor Photovoltaic Performance of DMSO-Free Tin Halide Perovskites

5 min
Gianluca Timò
RSE
First Demonstration of a Three Terminals-quadruple Junction InGaP/InGaAs/Ge/T/Ge Solar Cell

12 min
Diego Di Girolamo
3SUN
Perovskite Silicon Tandem Development in 3Sun Gigafactory

12 min
Silvia Colella
CNR, National Research Council
Interface Engineering based on Plasma Processing for Perovskite Solar Cells

12 min
Annalisa Bruno
Nanyang Technological University
Perovskites Thermal Evaporation for Advanced Photovoltaics and Optoelectronics Device Customization

14:20 | Topic 3 - Session 1
Photovoltaic applications

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Valeria Casalicchio
Eurac Research
Assessing BIPV Competitiveness in Selected European Renewable Energy Communities

5 min
Carmine Cancro
ENEA
Design And Testing of an Innovative Closed Agrivoltaic System: "Algaevoltaictm"

5 min
Gianfranco Modoni
CNR, National Research Council
BIPV designing by VR/AR and DT. The case of Parma Municipality administrative building

12 min
Giorgio Pastore
SoliTek
Case Study of Bifacial PV based Noise Barriers in Lithuania

12 min
Angele Reinders
Eindhoven University of Technology
Luminescent Solar Concentrator Photovoltaics: From Research to Design of Applications in Products and Buildings

12 min
Andrea Lamberti
Politecnico di Torino
Sustainable PV-Based Indoor Power Solutions: Can We Eliminate Power Management Electronics in Building Integrated Photovoltaic Systems?

Short presentations by the conference sponsors

Sponsors speech
3 minutes presentations

Midsummer

15:30 | Coffee break

15:30 - 16:40 | Parallel event
Lighting Flowers room

Project GoPV: What's going on?

Please, fnd the detailed program on page 19

15:30 | Poster elevator pitch | Topic 1
Fundamental research on photovoltaic materials and devices

3 minutes presentations

Sara Ferrara
Università di Torino
Green Production of Flexible Cathodes for Dye Sensitized Solar Cells: Biodegradable Cellulose-Based Substrates

Franco Trespidi
RSE
Design and Optimization of a High-Performance Compact Prismatic Solar Concentrator for CPV
Martina Botti
Università di Salerno
Electro-Thermal Circuital Model of PV Cells Subjected to Optical Degradation Phenomena

Filippo Annoni
RSE
Investigating Optoelectronic Properties of ZnSnN2 Grown by High-Power Impulse Magnetron Sputtering for Tandem Solar Cells

Pasquale Morvillo
ENEA
Development of Semitransparent Organic Solar Cells for Greenhouse Applications

Elisabetta Achilli
RSE
Strain Release and Morphology Evolution Control in Step-graded III-V Metamorphic Buffers on Ge: a Pathway for Sustainable MJ Solar Cells

Paola Jakuza
Università di Padova
Hotspot analysis on a Flexible PV Mini-modules based on IBC Solar Cells

Francesco Di Giacomo
Solertix
Towards Industrialization of Bifacial Module-Based Tandem

Daimiota Takhellambam
Università di Roma Tor Vergata
Augmenting Green Solvents in Upscaling Flexible Perovskite Solar Cells in Ambient Air

Donato Spolitore
Università di Parma
Delocalization Promoted by Structural Order Fosters Efficient Charge Separation at Molecular Heterojunctions

Paolo Mariani
CNR, National Research Council
A Technical Study to Bring Dye-Sensitized Solar Cells Technology Towards Scaled-Up Production

Alessandra Alberti
CNR, National Research Council
Resilience to Demixing and Phase Segregation in Perovskite Solar Cells Under Light-Dark Cycles and Temperature

Davide Delmonte
CNR, National Research Council
Advancing Ferro-Photovoltaic Materials Synthesis: Mechanochemistry as a Creative Pathway for SbSI
Daniel Alencar
Università di Torino
Sustainable Hole Transport Materials for Perovskite Solar Cells: Bridging Performance and Eco-Friendly Manufacturing

Poster elevator pitch | Topic 2
Electronics and PV integration with grid and storage systems

3 minutes presentations

Giovanni Spagnuolo
Università di Salerno
An Isomorphism-based PV Array Digital Twin

Asja Alic
Università di Trento
Optimal Operation and Revamping Strategy for an Integrated Photovoltaic -Battery Energy Storage System Considering Cyclic Degradation

Poster elevator pitch | Topic 3
Photovoltaic applications

3 minutes presentations

Leonardo Micheli
Università di Rome La Sapienza
The Impact of Dust Storms on the Growing Photovoltaic Capacity

Jordi Veirman
Eurac Research
Screening of Module Components Towards Improved Diffusive Properties of Overhead agriPV Modules

Kateryna Bondar
Università di Torino
Theoretical Characterization of NIR Cyanine Dyes for Dye-Sensitized Solar Cells (DSSC)

Serena Amenta
Politecnico of Torino
Vacuum Pouch Sealing and Polymer Electrolyte Integration for Scalable DSSC Fabrication

Ali Sohani
Università di Roma Tor Vergata
Evaluation of the Accuracy of Bifacial PV Power Estimation Models Using an Experimental Setup

Giuseppe Demofonti
Convert Italia Spa / Valmont Solar
Innovative Single Axis Tracker for Advanced AGRI-PV Plants
Giovanni Arcidiacono
Università di Salerno
Experimental Observation on a Bifacial Photovoltaic-Green Roof

Riccardo Adinolfi Borea
Università di Bologna
Optimizing Diffuse-Stow Tracking for Photovoltaic Systems: Balancing Energy Yield and Tracker Movement

Poster elevator pitch | Topic 4
Economics of photovoltaic supply chains and sustainability
3 minutes presentations

Francesco Groppi
Studio tecnico Groppi
Build PV Safely

Poster elevator pitch |Topic 5
Green energy transition and social transformations
3 minutes presentations

Luca Chirico
Università degli studi di Foggia
Analysis of Decision Making Process for Innovation: The Agrivoltaic

Massimiliano Mariani
CNR, National Research Council
Environmental Impact of Photovoltaic Modules and Solar Systems for the Energy Transition of Urban Areas

Giulio Poggiaroni
ETA-Florence Renewable Energies
Digital Platforms and Collaborative Strategies for Advancing Solar Architecture in Europe

Technical specifications:
The poster must be created in a format with the following maximum dimensions: 75 cm x 95 cm.

Hanging posters:
From 27 May at 8:30 and during opening session.

Poster removal:
From 28 may at 10:00 until a few minutes before the conference closing session.

Posters | Topic 1

- **Antonella De Maria**, ENEA
  Zno Nanoparticle Coating On Polymer Encapsulants For Application In Emerging Solar Cell Technologies
- **Fancesco Cipriani**, Università Salerno
  Graphene-Based Transparent Electrodes Behavior in Space Environment for Space Solar Cells Applications
- **Fabio Butrichi**, Università Milano Bicocca
  Alternative Buffer Layers for Cu2ZnSn(S,Se)4 and Sb2Se3 Solar Cells: Numerical and Experimental Study
- **Laura Lancellotti**, ENEA
  Dopant Free Silicon Heterojunction As Bottom Cell In Perovskite/silicon Tandem Solar Cells
- **Amr Osama Mostafa Mohamed**, Università Di Catania
  Advancing PV Thermal Modeling: Sensitivity to Real Electrical Operating Conditions
- **Alessio Dessì,** CNR, National Research Council
  Optimization of Semi-transparent DSSC Lifetime towards Building-integrated Photovoltaics
- **Michel Piliougine Rocha,** CNR, National Research Council
  Comparison of Short-Circuit Current and Temperature in Monofacial and Bifacial HJT Mini-Modules Under Different Tilt Angles
- **Berenice Elena Gaia Colombo**, Università di Milano Bicocca
  Flexible Kesterite Solar Cells Produced by Inkjet Printing
- **Gabriele Viada**, Università di Torino
  Polyurethane-based Matrices Hosting Novel NIR-emitting Dyes towards Colourless Luminescent Solar Concentrators
- **Claudia, Malerba**, ENEA
  Al-doped ZnO: insights on the Films Degradation
- **Carmen Serpico**, Università Di Napoli Federico II
  Interfacial Passivation Between CsPbI3 and Hole Transport Layers: Experimental and Theoretical Insights
- **Rabeb Issaoui,** Università Di Napoli Federico II
  Boosting the Performance of Tin Perovskite Solar Using Pyridinium Salt
- **Luca Serenelli**, ENEA
  Base Contact in Dopant Free Silicon Heterojunction Solar Cells
- **Giovanna Sozzi**Università di Parma
  Evaluating the Impact of Defects on Doping Profile Measurements in CIGS Solar Cells Using CV and DLCP
- **Mehr Un Nisa**, Università di Milano Bicocca
  Effect of Silver-doping on Kesterite Nanoparticles as Hole Transport Material in Perovskite Solar Cells
- **Muhammad Okash Ur Rehman**, Università Di Napoli Federico II
  Dimethyl Sulfoxide (DMSO) Free Tin Halide Perovskite over 10%
- **Noor Ul Ain Ahmed**, Università di Salerno
  Science Mapping Analysis on Computational Methods for Solar Cells
- **Alessandro Romeo**, Università Di Verona
  The effect of Thickness on the Sb2Se3 Superstrate Solar Cells
- **Alessio D'Ettorre,** Università di Siena
  In-silico Modeling of Bacteriorhodopsin/TiO2 Hybrid System: A Combined SMD-MD and QM/MM Study to Uncover Molecular Factors in Bio-based Solar Energy Conversion Devices

- **Alessia Sambri**, CNR, National Research Council
  Epitaxial ?-BaFe2O4 thin Films Grown by PLD as Possible Absorber layer in FE-PV Devices
- **Lorenzo Miele**, Università di Napoli Federico II
  Polymer Assisted Tin-Based Perovskite Solar Cell Formation
- **Adriana Pecoraro**, Università Di Napoli Federico II
  First-Principles Investigation of Optical and Transport Properties in Methylammonium Lead Iodide and Triple-Cation Perovskites
- **Mattia Della Monaca**, Solertix
  Ligand-modified SnO2 as an efficient scalable and Non-Fullerene electron transport layer for inverted perovskite solar cells
- **Adriana Pecoraro**, Università di Napoli Federico II
  Atomistic Insights into in Stability and Charge Transfer Improvements in Perovskite Solar Cells with Self-Assembled Monolayer and [1]Benzothieno[3,2-b][1]Benzothiophene Interlayer
- **Gennaro Vincenzo Sannino**, Università Di Napoli Federico II
  Solvent Engineering to Address the Conformality Issue of Spin-Coated TiO2 Compact Layers in CsPbBr3-based Solar Cells
- **Alessandro Romeo**, Università Di Verona
  A New Method for Sb-doped CdSeTe/CdTe Devices with Superior Stability
- **Giuseppe Nasti**, ENEA
  Passivation Strategies for Sputter-Protected Semitransparent p–i–n Perovskite Solar Cells
- **Salvatore La Manna**, CNR, National Research Council
  Stable and Scalable Sputter-deposited MoOx Contacts for High-Efficiency c-Si Heterojunction
- **Gaetano Mannino**, Università Di Catania
  Overview of Influencing Factors on Hail Lab Test
- **Federico Trezzini**, University Of Rome Tor Vergata
  Enhancing Voc and Performance of High-Bandgap Hybrid Perovskite Solar Cells via Interlayers and Passivation Strategies
- **Mariangela Latino**, CNR, National Research Council
  Advanced Electrode Technologies for a Sustainable Energy Future: Optimizing DSSCs, Flexible Solar Cells, and Hydrogen Production
- **Vanni Lughi, Università di Trieste**
  Upconversion Via Quantum Dot-Based Nanostructured Colloidal Films
- **Alessandro Romeo**, Università Di Verona
  Comparison of Flexible Molybdenum Foil and Sputtered Molybdenum Back Contacts for CZTSSe Solar Cells.
- **Anna De Girolamo Del Mauro**, ENEA
  MABr-based Post Treatments of Co-evaporated MAPbI3 for Bandgap Widening
- **Waqar Ahmad**, Università di Salerno
  Experimental Evaluation of the Temperature Coefficients for the Photovoltaic (PV) Module Close to Standard Test Conditions
- **Jessica Jazmine Nicole Barrantes**, Università di Padova
  Modeling of Transport Mechanisms in Silicon Heterojunction Solar Cells: Trap-Assisted Tunneling at the Emitter Interface
- **Claudia Casu**, Università di Padova
  Investigation of the Stability of Sb2Se3 Thin Film Solar Cell during Monochromatic Light Soaking
- **Giulia Spaggiari**, CNR, National Research Council
  Nanoscale Insights into Sb2Se3 Thin Film Solar Cell Interfaces

- **Michele Casappa**, CNR, National Research Council
  Interface Optimization via HTL and ETL Selection in Sb2(S,Se)3-based Solar Cells
- **Eliana Gaudino**, Università Di Napoli Federico II
  Low-emissive Transparent Conductive Oxides (TCOs) for High-Vacuum hybrid Photovoltaic-Thermal application
- **Annalisa Di Napoli**, Università Di Napoli Federico II
  Commissioning of a Measuring System for Characteritation of PV-T Cell in High Vacuum
- **Baptiste Charrier**, Università di Torino
  Indoor DSSCs: Investigating the Effect of Bufexamic Acid Treatment on Stability
- **Giovanni Spinelli**, Università di Torino
  Tunable Electronic and Conductive Properties of complxes via Transition Metal Substitution
- **Zain Ul Abdin Qureshi**, Università Di Napoli Federico II
  TCAD Simulations of Bottom and Top Cells for Tandem Solar Cells: Current-Voltage and Impedance Spectroscopy Analysis

Posters | Topic 2

- **Jawad Dabbas**, Jordan Electric Power Company
  Enhancing Solar Power Projects Viability Through AI-Optimized Ramp Rate Control for Voltage Management in Distribution Networks
- **Luigi Mattia**, Università di Salerno
  Lithium-ion battery safety
- **Fabio Casini**, Politecnico Di Torino
  Autonomous Solar-Powered Chronothermostat: A Novel Approach to Energy Harvesting in Indoor Environments
- **Grazia Barchi**, Università di Trento
  Enhanced Distribution System State Estimation in High PV Penetration Scenarios Using Smart Meter Data
- **Muhammad Affan Khan**, Marche Polytechnic University
  An Adaptive Appliance-Incremental and Photovoltaic-Aware Load Disaggregation Framework for Smart Energy Management

Posters | Topic 3

- **Shoaib Ahmed**, Università della Basilicata
  Modelling and Integration of Photovoltaics (PV) and Electric Vehicles (EVs) in Renewable Energy Community
- **Carlos Pavon**, Università di Salerno
  Innovative Online Diagnostics for Photovoltaic Systems: A Cost-Effective Approach Using Impedance Spectroscopy
- **Francesco Groppi**, Studio Tecnico Groppi
  PV Systems and Safety
- **Paola Fornarini**, Università Di Siena
  SWOT Analysis of Building-Integrated Photovoltaics: Evaluating Conventional and Emerging Technologies

- **Mahdiyeh Tabatabaei**, Università di Bologna
  Effective Integration of Solar Panels into Building Components: A Study of innovative Technologies and Design Constraints in Historic Contexts
- **Marco Memminger**, **Alessandro Minini**, Eurac Research
  Novel Method to Assess the Diffusive Properties of Commercial-size Semi-Transparent AgriPV Modules
- **Giulio Poggiaroni**, ETA-Florence Renewable Energies
  Integrating Photovoltaics in Nature-Based Solutions: The Case of Rimini
- **Federica Colucci**, ENEA
  Agrivoltaics and Desalination: A Virtuous Example of Nexus?
- **Fausto Barbolini**, arch. Fausto Barbolini
  The Concept of Solar Performance of Buildings And Urban Forms (PhD Thesis Recast)
- **Marcel Vroom**, H2arvester Systems
  Integrating Remote Sensing and Precision Agriculture With H2arvester: Enhancing Efficiency, Task Automation, and Sustainable Farming Practices.
- **Donato Pasculli**, Università di Torino
  NIR Photosensitizers and Organic Electrolytes for Colorless And Transparent Dye Sensitized Solar Cells
- **Martina Pelle**, Eurac Research
  Accurate prediction of the Electrical Behavior of Colored Photovoltaic Modules PMMA Films Doped with Organic Chromophores
- **Ecem Onen**, Università di Salerno
  Analysis of PAR and Broadband Irradiance Patterns to Enhance Agrivoltaic Design in Mediterranean Climates: A Case Study of Palermo
- **Musab Hammas Khan**, Università di Salerno
  Hybrid Nano-Electrodes of Lithium Batteries in Photovoltaics for Aviation
- **Giancarlo Dimauro**, M2 Energia Srl
  Dynamic Agrivoltaic Systems for the Cultivation of Medicinal Plants
- **Ruggero Nissim**, ENEA
  S.A.P.I.EN.T.E. Experimental Test Facility For Full-Scale Testing Of New Configurations Of Collective Thermal Electric Self- Consumption From Renewable Sources

Posters | Topic 4

- **Giuseppe Calogero**, CNR, National Research Council
  From Experiment to Simulation by AI : Life Cycle Assessment (LCA), Cost, and Environmental Impact Analysis of DSSC and PSC .
- **Cristina Polacchi, Eurac Research**
  Trends, Potentials and Challenges of Innovative PV Technologies: Lessons Learned from CANVAS Project
- **Girolamo Di Francia**, ENEA
  How long does a photovoltaic module last?

Posters | Topic 5

- **Paolo Picchi**, ETA-Florence Renewable Energies
  Designing Agrivoltaic Systems Tailored ontThe Local Landscape Agri-Environmental Systems: A Frontrunner Consultancy Approach in Italy
- **Salvatore Fabozzi**, ENEA
  Integrating Photovoltaic Systems into Smart Grids - Mission Innovation Project and the ENEA Smart Grid in Portici
- **Paolo Picchi**, ETA-Florence Renewable Energies
  Developing a Cross European Cooperation for Agrivoltaics Development. Outcomes from the Symbiosyst project.
- **Felipe Barroco Fontes Cunha**, Aess - Agenzia Per L'energia Lo Sviluppo Sostenibile
  Energy Community Hubs: A Review of Tools and Best Practices for Empowering Citizens
- **Kire Stavrov,** University Ss Cyril And Methodius
  Remote Sensing Methodology of the LiDAR Data in Determining Solar Potentials of the Built Environment in Negotino, Macedonia
- **Luis Enrique Garcia Marrero**, Università di Salerno
  On-line Diagnosis and optimization of Energy Management Systems for Smart Buildings
- **Jenifer Godoy Daltrozo**, Ufrgs
  Advancing Gender Equity in Solar Energy: Insights from a Case Study

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Hanging posters:
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Poster removal:
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16:40 | Topic 2
Electronics and PV integration with grid and storage systems

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Gianluigi Bovesecchi
Università di Roma Tor Vergata
Infinity, a Small-scale Prototype for Firm-PV Generation

5 min
Nicola Sangiorgi
CNR, National Research Council
Multi-functional WO3-based Photoelectrodes for Solar Supercapacitors

12 min
Roberto Giacomobono
UNiversità di Salerno
Total Efficiency of Voltage Doubler Based Multi Stage CSI Inverter

12 min
Alessandro Lorenzo Palma
ENEA
Supercapacitors as a System-Level Solution for Enhanced Photovoltaics Self-Consumption Strategies

12 min
Grazia Barchi
Eurac Research
The Role of PV and BESS in the Flexibility of Plus Energy Buildings

Short presentations by the conference sponsors

Sponsors speech
3 minutes presentations

DKC | Kenosistec | Termofisher

18:00 | Topic 1 - Session 2
Fundamental research on photovoltaic materials and devices

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Elisa Nonni
Solertix
Stack Optimization for Low-Cost Large Area Bifacial 4 Terminal Perovskite Silicon Tandem with Efficiencies Up To 30%

5 min
Noah Tormena
Università di Padova
Stability of Perovskite-Based Mini-Modules: Experimental Analysis and Interpretation

5 min
Fabio Matteocci
Università di Roma Tor Vergata
Transparent Perovskite Technology for BIPV and Tandem Application

5 min
Lucio Cinà
Cicci Research s.r.l.
The quest for advanced electro-optical tests in photovoltaic research

12 min
Antonio Abate
Università di Napoli Federico II
Lead-Free Perovskite Solar Cells

12 min
Carla Gobbo
Università di Milano Bicocca
Overcoming 20% Efficiency in Kesterite/Perovskite Tandem Solar Cells on Rigid and Flexible Substrates

12 min
Giulia Spaggiari
CNR, National Research Council
Enhancing the Performance of Sb2Se3 Thin-Film Solar Cells: Strategies for Optimization and the Role of Characterization

19:00 | Aperitivo

Prizes

Elevator pitch Topic 1 Award

Elevator pitch Topic 2 -5 Awards

Poster Award

Attractor paper of ReteIFV 2025

The Prizes will be delivered on Tuesday 27 May during the aperitivo

Wednesday 28 May

08:40 | Topic 1 - Session 3
Fundamental research on photovoltaic materials and devices

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Mirko Seri
CNR, National Research Council
Sodium Alginate as a Natural Substrate for Stable and Effcient Eco-Designed Organic Solar Cells

5 min
Lorenzo Squillantini
CNR, National Research Council
Enhancing the Performance of Inverted Hybrid Perovskite Solar Cells with Sustainable Carbon Nanoparticle Integration: Impact of Chemical Composition on Efficiency

5 min
Antonio Carella
Università di Napoli Federico II
Novel isoindigo derivatives as electron transport materials for perovskite solar cells

5 min
Roberto Speranza
Politecnico di Torino
Valerolactone as a Green and Low-Toxic Solvent for Dye-Sensitized Solar Cells under Indoor Illumination

12 min
Alessandro Lanuti
Solertix
Lamination of Tandem Perovskite Silicon 4T modules: a step toward industrialization

12 min
Thomas Brown
Università di Roma Tor Vergata
Photovoltaics for Indoor Energy Harvesting

10:00 | Coffee break

10:30 | Topic 4
Economics of photovoltaic supply chains and sustainability
Topic 5
Green energy transition and social transformations

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Gabriella Gonnella
Eurac Research
Economic Feasibility Assessment of Building-Integrated Photovoltaics Across Different Markets

5 min
David Moser
Becquerel Institute Italia
Solar Access and AI for Resource Democratization

12 min
Julia Nerantzia Tzortzi
Politecnico di Milano
Circular Production in Photovoltaic Supply Chains: A Lifecycle-Based Approach to Economic and Environmental Sustainability

5 min
Mirella De Falco
Università di Roma La Sapienza
The Social Acceptability of Agrivoltaics: Findings from an I-SETA Model

12 min
Paolo Picchi
Università di Firenze
Community Engagement In Designing Agrivoltaic Systems as Social-Ecological Systems - A Case Study in Friuli Region, Italy

Short presentations by the conference sponsors

Sponsors speech
3 minutes presentations

3SUN RiSE Technology

11:45 | Topic 3 - Session 2
Photovoltaic applications

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Marco Leonardi
3SUN
Outdoor Reliability of Solar Modules in Desertic Conditions: a Yearly Assessment by a Semi-empirical Approach

5 min
Giovanni Landi
ENEA
Photovoltaic-Powered IoT Platform for Indoor Environmental Monitoring

5 min
Federico Andreozzi
Università di Roma Tor Vergata
Long-Term Performance and Degradation Testing Of Bifacial PV Modules For Agri-PV Application

12 min
Federica Marandino
Università di Napoli Federico II
Support Tools for Agrivoltaic System Design: Technical Solution Data Sheets

12 min
Giosuè Maugeri
RSE
A Public Repository for PV Production Data with Fault Events: Enabling Advanced Fault Detection and Diagnosis Models

12 min
Martina Pelle
Eurac Research
Industrial feasibility study and scale-up of coloured encapsulant with organic fluorophores for BIPV applications

Short presentations by the conference sponsors

Sponsors speech
3 minutes presentations

Solitek OffGridSun

13:00 | Topic 1 - Session 4
Fundamental research on photovoltaic materials and devices

5 minutes presentations or 10 min. presentation + 2 min. Q&A

5 min
Floriana Morabito
CNR, National Research Council
Perspectives for a Spectral Splitting Solar Concentrator with Minimum Self-Shading for 4-Terminals and Bifacial Applications: Numerical Evaluations

5 min
Nadir Vanni
CNR, National Research Council
Ambient Air Deposition Allows Reaching Record Light Use Efficiency in FAPbI3 Perovskite Solar Cells

5 min
Erica Magliano
CNR, National Research Council
Advancing All-Perovskite Tandem Solar Cells: Optimization Strategies for Enhanced Efficiency

5 min
Salvatore Ferruggia Bonura
Università di Palermo
Optical Structural Feature Evaluation Of Glasses For Photovoltaic Applications

12 min
Marcello Franzini
Università di Torino
Ni-Based Coordination Polymer as Counter Electrode Exceeding 10% Efficiency in Dye Sensitized Solar Cells

12 min
Francesca Menchini
ENEA
Thermally Evaporated Indium Oxide as TCO for Fully-evaporated Silicon-based Heterojunction Solar CellsSolar Cells

12 min
Alessandro Romeo
Università di Verona
CdTe Solar Cells for Tandem Si Solar Cells

14:10 | Final session

Final Remarks and announcement of the venue of ReteIFV2026

Light lunch

27 May
15:30 - 16:40 | Parallel event
Lighting Flowers room

Project GoPV: What's going on?

Introduction
Paola Delli Veneri, ENEA, Project coordinator

- **Innovative materials for perovskite/Si tandem solar cells**
  Gennaro V. Sannino , ENEA, INSTM
- **TCO and Selective Contacts**
  Maria Miritello, Università degli Studi di Catania
- **Low-lead narrow-bandgap perovskite**
  Antonio Abate, Università degli Studi di Napoli Federico II
- **Design of Strong and Weak Intermolecular Interactions to Engineer Buried Interfaces in Inverted Wide-Bandgap Perovskite Solar Cells**
  Annamaria Petrozza, Istituto Italiano di Tecnologia
- **Interface engineering for the integration of wide band gap 2D perovskites**
  Alice Scardina, Università degli Studi di Pavia
- **Materials for perovksite cells in single and tandem configurations**
  Aldo Di Carlo, Università degli Studi di Tor Vergata
- **Modeling and Screening of Optimized Perovskite Material**
  Luca Gregori, Università degli Studi di Perugia
- **The applications of two-dimensional materials in photovoltaic**
  Cosimo Anichini, BeDimensional

Conference Chair

Paola Delli Veneri

Scientific and Strategic Committee

The members of the Permanent Consultation Board of ReteIFV

Claudia Barolo
Simona Binetti
Fabrizio Bizzarri
Paola Delli Veneri
Aldo Di Carlo
Angela Grassi
Salvatore Guastella
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David Moser
Giovanni Spagnuolo

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Maria Vittoria Valacchi
Erika Antonioli

With the participation of

Media partner

ReteIFV 2025 | 27-28 May 2025
Napoli, Parco Bagnoli
Auditorium della Porta del Parco, via Diocleziano 341

Kindly note:
Please be advised that the venue does not have Wi-Fi.